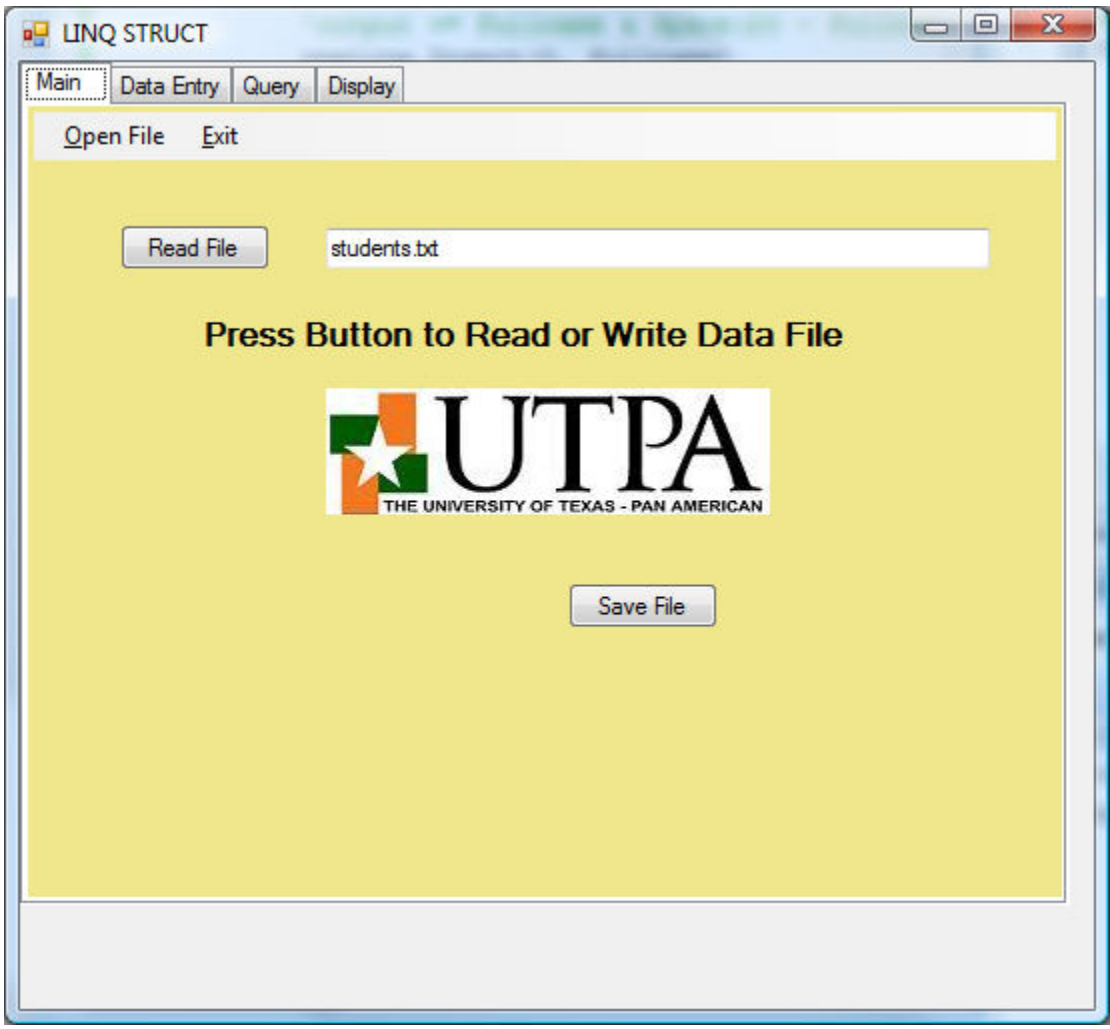# Lab Assignment # 8 A & B
Dr. Abraham

This is a pretty long assignment, so I split it into two. The first half is due next week and the second half is due the following week as regularly scheduled. Instructional objectives of this assignment are:
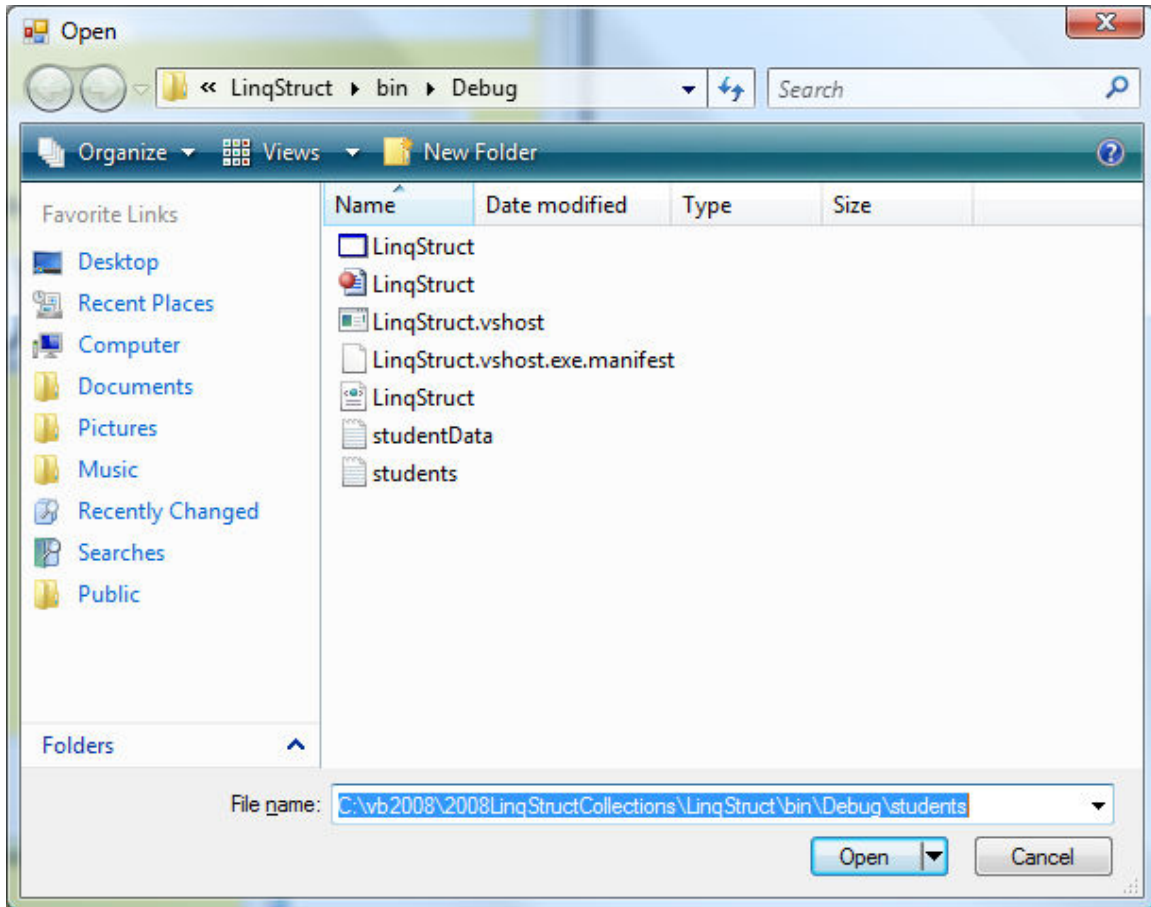
> **Files and Streams**
> **String Builder class**
> **Arrays of Struct**
> **Error Handling**
> **Collections**
> **LINQ**
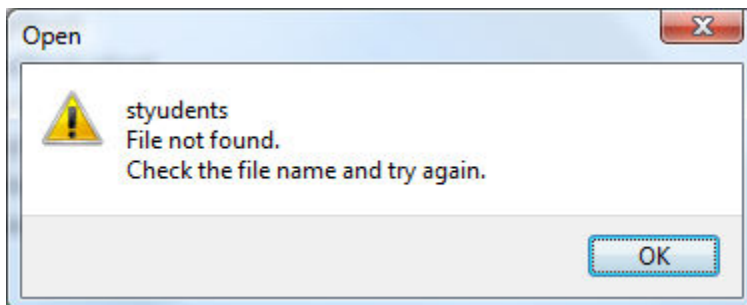> **Sorting and Binary Search**

Part A

Create a form with four tabs, name the tabs appropriately, add Menu Strips to handle files and whatever else you want to do, add records for several students and save them to a file.

Here are some screen shots:

LINQ STRUCT

Main | Data Entry | Query | Display

Open File   Exit

[Read File]   `students.txt`

Press Button to Read or Write Data File

[Save File]

You get this screen the Open File (or Save File) Menu is clicked. Make sure this file name appears in the main form along with any messages. Add exception handling in this sub routine. Also please enable and disables buttons as necessary.

Each record is added to an array of struct. I used a generic collection called list instead of creating my own array. The list handles automatically re-dimensioning as the list grows or shrinks.

LINQ STRUCT

Main | Data Entry | Query | Display

Open File   Exit

Read File   C:\vb2008\2008LinqStructCollections\LinqStruct\bin\Debug\student

Total Records Written to File: 13

THE UNIVERSITY OF TEXAS - PAN AMERICAN

Save File